



## State of New Jersey

**DEPARTMENT OF HEALTH AND SENIOR SERVICES**  
DIVISION OF EPIDEMIOLOGY, ENVIRONMENTAL AND OCCUPATIONAL HEALTH  
PO BOX 369  
TRENTON, N.J. 08625-0369

[www.nj.gov/health](http://www.nj.gov/health)

RICHARD J. CODEY  
*Acting Governor*

FRED M. JACOBS, M.D., J.D.  
*Commissioner*

November 16, 2005

TO: Health Officers, Animal Control Officers, and Veterinarians

FROM: Faye E. Sorhage, V.M.D., M.P.H.  
State Public Health Veterinarian  
Infectious and Zoonotic Diseases Program

SUBJECT: Avian Influenza Surveillance in New Jersey

### **What is Avian Influenza (AI)?**

Avian influenza is a contagious respiratory disease of birds caused by an influenza type A virus. AI spreads primarily through direct contact between healthy and infected birds, but also through indirect contact with contaminated equipment and materials. Wild birds, the natural reservoir for AI, can transmit the virus to other bird species. Most bird species are susceptible to infection, including chickens, turkeys, pheasants, quail, ducks, geese and guinea fowl.

The disease in birds has two forms, both of which are highly contagious. The first form causes mild or no clinical signs in birds and is referred to as Low Pathogenicity AI (LPAI). Of greater concern is the second form, known as Highly Pathogenic AI (HPAI), which causes severe illness and high death rates in birds. The 2004/2005 outbreaks in Asia are the results of HPAI, strain H5N1.

The recent cases of AI illness seen in humans in Asia are caused by this strain of HPAI. It should be emphasized that transmission to humans has been the result of very close contact with domestic poultry and ducks, and that these infections do not pass easily (or virtually at all) from person-to-person.

Although at this time HPAI is not easily transmissible to humans, HPAI might become more infectious and be able to spread easily from person-to-person because influenza viruses have the natural ability to recombine and mutate. Therefore, health officials are maintaining heightened concern and are closely following HPAI events in Asia and Europe.

### **What is the current status of AI in the United States and New Jersey?**

Fortunately, **avian influenza strain H5N1 has not been found in wild or domestic birds in the United States.** Nationally, AI surveillance strategies have focused on the monitoring of domestic poultry, as well as monitoring for the disease in wild birds. In wild birds, the focus is on migratory waterfowl, such as ducks and geese. Theoretically, the transmission of AI to birds in the United States could occur when birds from Asia migrate to Alaska along the Asia-Pacific Flyway. However, historical testing of these bird populations indicates that the avian influenza strains between these groups have remained distinctly different.

In New Jersey, the Division of Animal Health, Department of Agriculture (NJDA), is performing AI surveillance in poultry markets, auctions, and backyard flocks. The Division of Fish and

Wildlife, Department of Environmental Protection (DEP), monitors mortality in wild bird populations of interest and is available to investigate and test suspicious die-offs. These two agencies are working together with the regional USDA office to ensure early detection of AL in New Jersey.

### **What should Health Officers do?**

The New Jersey Department of Health and Senior Services (DHSS) and local health departments have begun to receive calls from concerned citizens reporting dead birds and requesting information about AI. The public is well aware of the protocol for reporting dead birds as a surveillance tool for West Nile virus (WNV); although WNV surveillance has ended for the 2005 season, residents are apparently continuing to call to report dead birds and wanting to assist with AI surveillance. Most of these calls are in regard to dead crows or songbirds, however, whereas AI would most likely affect waterfowl and not these species.

It is recommended that when receiving these calls, basic information be recorded and evaluated by the local health department (LHD) – i.e., date and location of event, species involved, number of birds, circumstances involved and so on. The caller should be thanked for taking the trouble to make the report and in assisting us with surveillance efforts. If the situation appears to be a finding of one or two dead birds at a single location, the caller should be told that this type of thing is usually the result of normal bird mortality and not indicative of a disease outbreak. It should be noted that there are many natural causes of bird mortality including predation, trauma from flying into windows and consuming insects contaminated with insecticides. Reassure the caller that you will record the information and notify the proper authorities if an unusually high number of reports are received. On the other hand, if the caller describes a cluster of many dead birds in a small geographic area or anything else that you consider unusual, record the information as noted above and also contact the DHSS Veterinary Public Health Unit (contact information below) for consultation.

The DHSS will forward all calls involving domestic birds to the NJDA for investigation. Reports of wild bird mortality will be discussed with the DEP, Wildlife Pathologist. If the Pathologist feels it is warranted, arrangements will be made for the examination of wild birds involved in significant die-off events. If examination of the birds is indicated, only freshly dead birds should be collected and kept at refrigerated temperatures until they can be delivered to the DEP Pathology Laboratory in Clinton, New Jersey. Birds of highest concern are captive pheasants and migratory waterfowl. Bird specimens may be autopsied by the wildlife pathologist and samples tested for avian influenza virus at the NJDA. Information about bird die-off events will be shared between the DEP, DHSS and NJDA.

#### Contact Information for the DHSS Veterinary Public Health Unit

Dr. Faye E. Sorhage, State Public Health Veterinarian  
Dr. Colin T. Campbell, Senior Public Health Veterinarian  
Ms. Linda Frese, Rabies Control Technician

During working hours (Monday - Friday, 8:00 AM - 5:00 PM): 609-588-3121 or 7500  
Nights, Weekends, and Holidays (emergencies only): 609-392-2020